

Public Involvement Programs That Support Water Quality Management

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The Rouge River, a tributary to the Detroit River, in southeast Michigan, has been documented as a significant source of pollution to the Great Lakes System. The Rouge River Watershed spans approximately 438 square miles in 48 communities and three counties and is home to over 1.5 million residents. The eastern portion of the watershed contains much of the older, industrial areas of Detroit and Dearborn. The western and northern portions contains newer suburban communities and areas under heavy development pressure.

This paper discusses the programs used by the Public Involvement Team of Wayne County's Rouge River National Wet Weather Demonstration Project (Rouge Project) to (1) increase watershed awareness of Rouge River Watershed residents and business owners, (2) educate them about pollution sources to the Rouge River and (3) involve them in restoration of the Rouge River by showing them that small changes in their daily activities can help improve water quality and restore the river.

The Rouge Friendly Neighborhood Program was piloted over a two year period in watershed neighborhoods in three distinctly different areas of the watershed. All neighborhoods were surveyed to determine the initial level of knowledge about water quality issues, lawn care maintenance, and pollution prevention practices. Survey results were used to fashion a neighborhood program for each area. All three neighborhoods received Rouge Friendly brochures, newsletter articles, and other materials.

The Rouge Friendly Business Program, a companion program to the neighborhood effort, sought to educate small-to-mid-sized businesses about how they can positively impact the Rouge River by making small changes to daily business practices. Since auto-related businesses are very common in the Rouge River Watershed, an automotive services roundtable was convened. The partners included representatives of automotive service associations, the local chamber of commerce, and businessmen who met periodically for a year to review draft materials, make suggestions about the program's promotion, and to help mold the program before it was implemented. Once implemented, the industry representatives promoted the program in their publications and recruited businesses to participate in the program.

This paper will describe both of these pollution prevention programs and discuss how the Brightmoor neighborhood in the Rouge River Watershed was impacted by the Rouge Friendly Neighborhood and the Rouge Friendly Business Programs.

The Rouge Friendly Neighborhood Program

The Rouge Friendly Neighborhood Program was designed to be carried out by responsible neighborhood organizations. Preferred prerequisites were:

1. The group participating in the program must represent a defined area or neighborhood.

2. The group would participate in the Friends of the Rouge River Watch Program. The river system need not pass directly through the neighborhood for participation. An assigned segment could be identified for the group by Friends of the Rouge.
3. The group would participate in the Friends of the Rouge Storm Drain Stenciling Program. The stenciling of storm drains should include, but is not limited to, all the storm drains within their designated neighborhood or area.
4. The group should actively participate and/or encourage proper household hazardous waste management. This could occur through:
 - Reduced purchasing of hazardous house chemicals
 - Proper use of household hazardous chemicals
 - Proper disposal of hazardous household chemicals
 - Use of less-toxic alternatives to household hazardous chemicals

The group can accomplish this requirement by distributing information concerning proper household hazardous waste management to their designated neighborhood.

5. The group would facilitate education of residents regarding non-point source pollution. Information would be provided by the Rouge Project Team for distribution to the designated neighborhoods.
6. Submittal of semi-annual reports discussing the activities that have been taking place could be a requirement to maintain Rouge Friendly Neighborhood status.

Three Rouge Project area neighborhoods representing different demographics and development history were chosen as pilots for the Rouge Friendly Neighborhood Program. They were the (1) Brightmoor area of Detroit, an older, developed area of the watershed along the Main Branch of the Rouge River; (2) Golfview Manor subdivision in Dearborn Heights, a newer subdivision along the Middle Branch of the Rouge River; and (3) West Bloomfield Place, a subdivision in West Bloomfield Township, a developing area along the Upper Branch of the Rouge River. These three pilots represented communities with diverse demographics and concerns.

The Brightmoor neighborhood was a deteriorating area with strong community activism regarding neighborhood problems and concerns. The neighborhood also showed strong stewardship for the Rouge River, which serves as a western boundary to the neighborhood and flows through a nearby park. Golfview Manor in Dearborn Heights was a more upscale, manicured neighborhood that was very active through its subdivision association, but did not have a real connection to the River. West Bloomfield Place in West Bloomfield Township was an upper income, less urban area bounded by a wetland.

Meetings were held with a core group of representatives from each neighborhood to garner support from the neighborhoods' leadership and to discuss what the program was and what the expected outcomes were.

The residents of all three pilot areas were sent a survey, distributed by mail or door-to-door, to document their knowledge of Rouge River water quality, storm water issues, and household hazardous waste disposal. In addition, respondents were asked for demographic information. The survey information was used to determine what the Rouge Friendly Neighborhood Program should focus on in each particular neighborhood.

Educational materials that had been developed about storm water pollution, household hazardous waste (and its disposal), and watershed awareness were reviewed by each group. Each core group helped develop the particular program that would be implemented in their neighborhood, because Rouge Project staff knew that no program would be a success without the core groups' support and endorsement. These core group members were relied on to explain the program at neighborhood meetings.

The Rouge Friendly Business Program

The Rouge Friendly Business Program was developed as a partnership between Wayne County, local government, and the business community to restore and protect the Rouge River. To accomplish this goal, information and assistance are provided to small business owners to teach them how they can positively affect the water quality of the Rouge River by changing some of their everyday practices. The education process is not about major contaminants, but those little things that slip the mind, such as keeping the dumpster lid closed and storing materials under cover. These simple actions can affect water quality because they stop pollutants from entering the storm system. As an incentive to participate, Wayne County embraced the concept that businesses in the watershed that demonstrate stewardship and a strong environmental ethic should be recognized by the community for their voluntary participation. As such, these businesses should enjoy greater name recognition through the efforts of the local and regional media as well as specific program materials, such as decals and magnets that identify the business as Rouge Friendly.

The Rouge River Watershed has approximately 42,000 businesses in its 48 communities and three counties. To design program materials that would have the greatest impact, three criteria were developed to target business types. They are:

- The business has a high incidence of illicit connections to storm drains
- The business conducts a significant number of pollutant-generating activities outdoors
- The business is found in large numbers in the watershed

Using these criteria, six types of businesses were selected and specific activities identified. They are:

- Vehicle Service Industry
- Food producers, grocers, and eating establishments
- Metal Machining
- Earth Disturbing Construction
- Remodeling and Repair Contractors
- General Business

Pollution control criteria were established for each kind of business. These criteria were used to create a **self-assessment** form to be used by business owners to evaluate how “Rouge Friendly” their businesses are. Best Management Practices (BMPs) were also written that correspond to each activity and this information was put into the booklet along with a self-assessment form for distribution.

Representatives of various trade organizations were invited to participate in a Vehicle Service Industry Roundtable. The roundtable was asked to review and comment on the educational materials, the self-assessment form, the BMPs, and the best way to conduct program outreach. Rouge Project staff sought to engage businesses in an ongoing dialogue to determine what approach would work best, with a secondary goal of determining how to get businesses to participate. Feedback from this group resulted in a name change from the “Clean Business Program” to the “Rouge Friendly Business Program.” This was not a quick process, but took approximately six months of meetings to (1) form a Vehicle Service Industry roundtable, (2) explain the purpose of the Rouge Friendly Business Program, and (3) refine the program and products. The Rouge Friendly Business Program elements were finalized as follows:

- Self-assessment form and action plan
- Best Management Practices

- Site visits by technical staff
- Recognition materials for participating businesses (stickers and magnets)
- Business pledge and newspaper recognition

After these materials were finalized, Wayne County and Rouge Project staff promoted the Rouge Friendly Business on a pilot basis and recruited businesses through the following mechanisms:

- Business Roundtable contacts
- Letter and telephone contacts
- Door to door contact with businesses
- Contact through homeowner/neighborhood associations
- Integration of Business and Residential Programs

By the end of the pilot period, the Wayne County Department of Environment had recognized 20 businesses as Rouge Friendly.

The Brightmoor Community Pilot

The Brightmoor area of Detroit was developed in the 1920s as a neighborhood for working-class families. Most houses are frame, with the newer areas of the neighborhood (1940s and 1950s) of brick construction. Over the past 15 years, the Brightmoor area has deteriorated. Its once vibrant business strip is dotted with boarded, vacant buildings, graffiti, trash, and debris. Whole blocks of residential land are vacant and overgrown and illegal dumping is abundant. Environmental abuses ranged from a myriad of abandoned vehicles to illegal car repair businesses on residential streets. The Rouge Friendly Neighborhood Survey (Attachment A), distributed in Brightmoor in 1996, showed that the top two environmental concerns in the area were illegal dumping and abandoned housing.

Despite these challenges, the Brightmoor neighborhood had two characteristics that made it a viable pilot for the Rouge-Friendly Programs. One, Eliza Howell Park, located on its western edge, was traversed by two branches of the Rouge River. Second, Brightmoor had a wealth of grassroots organizations who were working to make the neighborhood better. Some annually removed log jams and other debris from the Rouge River in Eliza Howell Park during Rouge Rescue, sponsored by Friends of the Rouge, a grassroots organization serving the whole watershed.

Initial contact was made with the Brightmoor Concerned Citizens and other neighborhood representatives in January, 1996. The group agreed that they would like to participate as a Rouge Friendly Neighborhood pilot. A month later, the same group met again with Rouge Project staff. This time, city parks staff were present. They were told about the possibility of grant funding for storm water projects by the Rouge Project. The group brainstormed the kinds of things they would like to see happen at the park, which had suffered from spotty maintenance. They agreed that they would like to see wildflowers and prairie grass planted, nature trails restored, and a community garden created. The parks department later applied for and was awarded a \$180,000 grant to plant wildflowers and prairie grasses and to install nature trails in the lower end of the park, near the Rouge River.

The next step in the program was to survey residents about their knowledge of pollution entering the river and household hazardous waste disposal, their neighborhood environmental concerns, and demographic information. The survey was created with input by the core neighborhood group. The major data extracted from the survey were:

- 78% thought the Rouge River was polluted or very polluted, and 20% thought the river was getting worse.
- 38% did not know that the storm drains lead directly to the Rouge River. However, 56% understood that sanitary sewers go to the wastewater treatment plant.

- . 18% correctly answered that industry pollutes the Rouge River the least and 66% thought stormwater pollutes the least.
- . 87% maintained their own lawn. There was an even distribution among those who never fertilize their lawns and those who fertilize 1-2 times per year.
- . 75% did not change their own motor oil.
- 80% took their cars to a car wash instead of washing it themselves.
- 92% claimed indicated that they know what household hazardous waste is, and 73% correctly identified motor oil as a household hazardous waste. However, 54% did not properly dispose of their wastes.
- . 83% said they were committed/very committed to make small changes to prevent pollution.

Following are neighborhood issues, in order of importance:

1. Abandoned buildings
2. Illegal dumping
3. Household hazardous material disposal
4. Infrequency of street sweeping and storm drain cleaning
5. Recycling
6. Do-it-yourself car repair/illegal car lots on residential streets
7. Overuse of garden/lawn pesticides
8. Overuse of fertilizer
9. Composting

Wayne County Rouge Project staff, Friends of the Rouge, and Brightmoor Concerned Citizens leadership made a presentation, including survey results, to the general membership in May, 1996. The general membership was enthusiastic about the program. The annual Rouge Rescue held in Eliza Howell Park on June 1, 1996, was expanded to include other activities, including storm drain stenciling, a tour of a newly constructed combined sewer overflow basin, and children's games.

Subsequent meetings with the Brightmoor group were used to brainstorm what the specific program elements should be and what outcomes were expected. The following elements were supported by the core group:

- Urban gardens on vacant lots
- Composting education
- Attempting to get rid of the massive log jam at the confluence of the Upper and Main Rouge River in Eliza Howell Park
- . A tour of the area for the Detroit Environmental Court judge
- Lawn signs that read "I support the Rouge Friendly Neighborhood Program"
- Early recognition of well-maintained lawns and gardens; Brightmoor's "Resident of the Month"

- A Brightmoor Rouge-Friendly Business Program
- A renters' workshop to educate tenants about their rights and responsibilities and the responsibilities of landlords
- Educational materials in the various neighborhood newsletters

All of the activities were implemented except the lawn signs, the recognition of well-maintained gardens, and the renters' workshop. By the fall of 1996, the focus had shifted to conducting a monthly combined resident/business owners' meeting to include businesses, which were primarily vehicle service oriented, into the Rouge-Friendly initiative.

Results and Outcomes

Rouge-Friendly Neighborhood Program: Because of the enthusiasm and commitment of Brightmoor residents and business owners, many activities were conducted. They were:

- Thousands of educational brochures and children's materials were distributed in community centers, businesses, schools, and newsletters.
- A local business owner successfully sued a public utility that was pumping hundreds of gallons of polluted stormwater into the Rouge River.
- The local community organization not only enthusiastically participated in the annual Rouge Rescue event, but conducted another such event on its own.
- Through a partnership with the city parks department, the Greening of Detroit, and the Brightmoor Concerned Citizens, 100 trees were planted in Eliza Howell park by 200 local elementary school students.
- City officials agreed to conduct an environmental ticket blitz in the neighborhood, which resulted in the following tickets being written: 179 parking tickets, 71 abandoned cars tagged for removal, 8 stolen cars being towed, 15 public works tickets for bulk garbage being put at the curb too early, 2 environmental protection tickets, and 47 tickets for inoperable vehicles.
- A monthly meeting that included neighborhood residents, business owners, non-profit organizations, city officials (including police commanders), and county officials focused on environmental issues.

Rouge-Friendly Business Program: While many outstanding initiatives were accomplished by meeting with the Brightmoor stakeholders monthly, only one Brightmoor business was recognized as Rouge Friendly after ten months of monthly meetings. The meetings were well-attended and business owners felt comfortable discussing their environmental concerns. In June, of 1997, the approach for recruiting Brightmoor businesses as Rouge Friendly was changed. A community leader was paired with a technical staff member and they proceeded to visit neighborhood businesses. They visited 14 neighborhood businesses several times over a two-month period. Information about the program was left with the business owners, as well as an offer from the technical staff member to help the business owner with the self-assessment form. Through this effort, Wayne County recognized six additional Brightmoor businesses as Rouge-Friendly. This was a successful (43% participation), but labor intensive, method of recruiting businesses.

ATTACHMENT A



Are you willing to **prevent pollution** in your **neighborhood**?

Start today by filling out this questionnaire.

We are working with the Rouge River National Wet Weather Demonstration **Project** to make our subdivision a more attractive place to live. We have been chosen as one of three pilot neighborhoods in the Rouge River Watersheds to participate in a pollution prevention program that may be used as a model for other urban watersheds across the country. In order to design a program that best fits our needs, we need you to answer a few questions. The following survey is voluntary and **confidential**. Use the enclosed pre-stamped envelope to return the questionnaire by April 22, 1996.

	Very polluted	Somewhat polluted		Not polluted	
1. Do you think the Rouge River is polluted?	5	4	3	2	1
	Getting cleaner	Staying the same		Getting worse	
2. Do you think the Rouge River Is getting cleaner, staying the same, or getting worse?	5	4	3	2	1
3. Where does water go when it enters an outside storm drain in your neighborhood?	<input type="checkbox"/> To a storage tank under the ground <input type="checkbox"/> To the Rouge River <input type="checkbox"/> To the waste water treatment plant <input type="checkbox"/> Don't know				
4. Where does water go when it is flushed down the toilet or sink?	<input type="checkbox"/> To a storage tank under the ground <input type="checkbox"/> To the Rouge River <input type="checkbox"/> To the waste water treatment plant <input type="checkbox"/> Don't know				
5. What pollutes the Rouge River the LEAST?	<input type="checkbox"/> Combined sewer overflows (a mixture of sewage and stormwater that flows into the river when it rains.) <input type="checkbox"/> Stormwater (water that runs off the ground and enters the river) <input type="checkbox"/> Industry				
6. How do you maintain your lawn?	<input type="checkbox"/> Paid professional company <input type="checkbox"/> Paid neighbor <input type="checkbox"/> Someone in the household maintains it				
7. How often is your lawn fertilized?	<input type="checkbox"/> 1 to 2 times per year <input type="checkbox"/> 3 to 4 times per year <input type="checkbox"/> More than 4 times per year <input type="checkbox"/> Never				
a. Where do you change the oil in your car?	<input type="checkbox"/> Auto Repair Shop/Quick Oil Chnage <input type="checkbox"/> Yard <input type="checkbox"/> Street <input type="checkbox"/> Driveway				
9. Do you usually wash your car or take it to a car wash?	<input type="checkbox"/> Wash it myself <input type="checkbox"/> Carwash				
10. If you change your oil at home, how do you dispose of it?	<input type="checkbox"/> In the garbage <input type="checkbox"/> In the sewer <input type="checkbox"/> Don't know		<input type="checkbox"/> On the ground <input type="checkbox"/> Take to facility that accepts used oil		
11. Do you know what household hazardous materials are?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
12. Which of the following is a household hazardous material?	<input type="checkbox"/> Baking soda <input type="checkbox"/> Motor Oil		<input type="checkbox"/> Lemon oil <input type="checkbox"/> Vinegar		

13. How do you dispose of your household's hazardous materials?
- ☐ Put it in the trash ☐ Dump it down the sink
☐ Dump it on the ground ☐ Don't know
☐ Take it to a Household Hazardous Drop-off Area

14. Indicate whether the following environmental issues are very important, important, or not important to your subdivision.

	Very important		Important		Not important
Overuse of fertilizer	5	4	3	2	1
Composting	5	4	3	2	1
Abandoned buildings	5	4	3	2	1
Frequency of street sweeping and storm drain cleaning	5	4	3	2	1
Overuse of garden/lawn pesticides	5	4	3	2	1
Recycling	5	4	3	2	1
Household hazardous waste	5	4	3	2	1
Illegal dumping	5	4	3	2	1
Do-it-yourself car repair / Illegal car lots on residential streets	5	4	3	2	1
Other (specify:)	5	4	3	2	1

15. You can make small changes to prevent pollution (i.e. the type of fertilizer you purchase, how you dispose of your motor oil, etc.). What is your level of commitment to make these changes?

Very committed Somewhat committed Not interested

5 4 3 2 1

16. How many people, including yourself, live at this address?
- ☐ 1 ☐ 5
☐ 2 ☐ 6
☐ 3 ☐ More than 6
☐ 4
17. How many of these are children?
- ☐ 0 ☐ 3
☐ 1 ☐ 4
☐ 2 ☐ More than 4
18. How many pets do you own?
- ☐ 0 ☐ 3
☐ 1 ☐ 4
☐ 2 ☐ More than 4
19. What is your gender?
- ☐ Female • : Male
20. What is your age group?
- ☐ Under 18 years ☐ 46-60 years
☐ 18-30 years ☐ Above 60 years
☐ 31-45 years
21. What was the last grade you completed in school?
- ☐ Some high school
☐ Completed high school
☐ Post-high school training
☐ Some college
☐ Completed college
☐ Graduate or professional school

Thank you **for** doing your part in cleaning up **our subdivision!** Remember, return the questionnaire in the pre-paid envelope by April 22, 1996.
Any questions should go to John or Shelley Mlynarczyk at 533-3453